

REMARKS

1. In response to the Office Action mailed March 10, 2005, Applicant respectfully requests reconsideration. Claims 1-29, 44-49, 51 and 53-65 were last presented for examination in this application. In the Office Action, claims 1-29, 44-49, 51 and 53-65 were rejected. By the foregoing Amendments, claims 1, 3, 4, 10, 11, 12, 16, 22, 25, 44, 45, 48, 51, 60, and 63 have been amended. Claim 66 has been added. No claims have been canceled. Thus, upon entry of this paper, claims 1-29 and 44-49, 51 and 53-66 will be pending in this application. Of these fifty (50) claims, four (4) claims (claims 1, 25, 44, and 66) are independent. Based on the above Amendments and following Remarks, Applicant respectfully requests that all outstanding objections and rejections be reconsidered, and that they be withdrawn.

Art of Record

2. Applicant acknowledges receipt of form PTO-892 identifying additional references made of record by the Examiner.

Claim Objections

3. Claims 1, 3, 4, 11, 12, 22, 25, 44, 45, 48, 51 and 63 have been objected to due to various informalities. The claims have been amended in accordance with the Examiner's suggestions, thereby accommodating the objections.

Claim Rejections Under 35 USC 112, second paragraph

4. The Examiner has rejected dependent claims 10, 16 and 60 under 35 USC §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant has amended claims 10, 16 and 60 to obviate the Examiner's rejections. Applicant, accordingly, respectfully requests that the Examiner reconsider and withdraw the rejections under 35 U.S.C. 112; second paragraph.

Claim Rejections Under 35 USC 103(c)

5. The Examiner has rejected independent claims 1, 25 and 44 under 35 USC §103(a) as being unpatentable over U.S. Patent No. 5,222,028 to LaBarre et al. (hereinafter, "LaBarre") in view of U.S. Patent No. 6,598,224 to Maeda et al. (hereinafter, "Maeda"). Applicant respectfully disagrees.

6. Claim 1 recites, in part, "pulse characteristics ... stored in a signal pulse characteristic data unit comprising a pulse identifier data unit uniquely identifying each of said plurality of pulses of said acquired signal, and a plurality of pulse measurement results data units associated with each said pulse identifier." (*See*, Applicant's claim 1, above.)

7. In rejecting claim 1, the Examiner recognized that Labarre does not disclose a signal pulse characteristic data unit comprising a pulse identifier and a plurality of pulse measurement results data units. (*See*, Office Action at pg. 6: "LaBarre does not explicitly indicate that the data is stored in the memory in this form."). Instead, the Examiner relied on col. 11 lines 27-31 and Fig. 6 of Maeda for allegedly disclosing this limitation.

8. Maeda is directed to a data management unit in a computer system. The portion of Maeda referenced by the Examiner discloses that Figure 6 of Maeda illustrates a data table storing a data number, a data type, a data name, a number of array dimensions, an array number, and a top address of the all object data items in array elements so that these parameters correspond to each other. This portion, along with corresponding Fig. 6, however, does not disclose that this data table stores any information regarding pulses nor any information regarding pulse measurement results. Moreover, pulses are not mentioned in Maeda. Instead, the table of Fig. 6 merely stores data regarding data stored in a separate data storage unit 10.

9. Specifically, data storage unit 10 of Maeda is disclosed as storing data relating to a corresponding object, S1, the stored data including state data collected from the object, S1. A parameter file 11 is then created for this data that includes the data type for each data object stored in storage unit 10, its data name, the number of array elements it has, the number of array dimensions thereof and the top address of each name thereof. This parameter file is then used in the creation of data table 14 of Fig. 6. (*See*, Maeda at col. 10 lines 6-27).

10. As such, data table 14 of Figure 6 merely stores information (e.g., name, type, etc) regarding state data stored in a separate storage unit 10. Data table 14, however, does not

store any of this state data. Accordingly, Fig. 6 of Maeda does not even teach or suggest a data structure that includes any measurement data – let alone storing pulse measurement results.

11. Thus, even if the references were to be combined, the resulting system would not contain all the features of Applicant's invention. For at least these reasons, Applicant respectfully requests that the above rejection be reconsidered and withdrawn.

12. Applicant further submits that the Examiner has also failed to provide a prima facie case of obviousness for at least the additional reason that there is no motivation to combine Maeda and LaBarre. As stated by the Federal Circuit in *In re Lee*, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002), specific reasons must be shown in the art suggesting a combination of references. (See also *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000) (“[P]articular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed.”)).

13. The Examiner cited col. 2 lines 38-46, column 11 lines 27-31, and column 12 lines 8-18, as allegedly providing a motivation to combine Maeda with LaBarre. Applicant respectfully disagrees. In particular, col. 2 lines 38-46 merely discusses alleged deficiencies in prior art data access programs in converting data to a different software language. It, however, does not mention anything about identifying measurement data or identifying pulse measurement data. Col. 11 lines 27-31 merely discuss the contents of the above-discussed data table of Fig. 6; and col. 12 lines 8-18 merely describes a mechanism of using the data table 14 of Fig. 6 in retrieving data from storage unit 10. As discussed above, data table 14 of Maeda is directed to storing information about state data stored in separate storage unit 10. As such, nothing in Maeda suggests that it is concerned with pulse measurements, nor a data structure storing both a unique identifier and corresponding measurement results data.

14. Thus, there is no motivation to combine Labarre and Maeda, let alone that they be combined in the manner concerned. And, even if they were combined, the resulting combination would fail to contain all the elements of Applicant's claimed invention. Therefore, Applicant respectfully asserts that the Section 103 rejection based on LaBarre and Maeda is improper and should be withdrawn.

15. Claim 25 recites, in part, “pulse characteristics ... stored in a signal pulse characteristic data unit comprising a pulse identifier data unit uniquely identifying each of

said plurality of pulses of said acquired signal, and a plurality of pulse measurement results data units associated with each said pulse identifier.” Applicant respectfully submits, for at least the reasons noted above, that the art of record neither discloses, teaches nor suggests Applicant’s invention as recited in independent claim 25. Withdrawal of the rejection of claim 25 is, therefore, respectfully requested.

16. Claim 44 recites, in part, “pulse characteristics ... stored in a signal pulse characteristic data unit comprising a pulse identifier data unit uniquely identifying each of said plurality of pulses of said acquired signal, and a plurality of pulse measurement results data units associated with each said pulse identifier.” Applicant respectfully submits, for at least the reasons noted above, that the art of record neither discloses, teaches nor suggests Applicant’s invention as recited in independent claim 44. Withdrawal of the rejection of independent claim 44 is, therefore, respectfully requested.

17. Applicant respectfully assert that all dependent claims are patentable for at least the same reasons as those noted above with regard to their respective independent claims.

New Claim

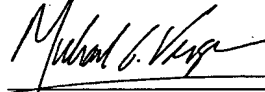
18. Applicant has also added new claim 66, which recites, in part, “a pulse management system configured to ... generate at least one measurement statistic for the particular pulse measurement type, wherein the at least one measurement statistics are generated using the generated pulse measurements of the particular pulse measurement type for the plurality of pulses.” Applicant respectfully submits that new claim 66 is allowable over the cited references.

19. In a December 28, 2004 Office Action, the Examiner alleged that Labarre discloses measurement of a DC offset, which the Examiner stated was determined by statistical analysis. This DC offset, however, is a measurement for a single pulse (*See*, Labarre col. 3 lines 31-37; col. 4 lines 34-49, and Table 2). As such, Labarre does not disclose generating this DC offset using pulse measurements of a particular pulse measurement type for a plurality of pulses. As such, Applicant respectfully submits that neither Labarre nor any of the other cited references, whether taken alone or in combination teach or suggest the invention as recited in claim 66.

Conclusion

20. In view of the foregoing, this application should be in condition for allowance. A notice to this effect is respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Michael G. Verga", is written over a horizontal line.

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June 10, 2005